DHS'S SCIENCE AND TECHNOLOGY DIRECTORATE: IS IT STRUCTURED FOR SUCCESS

HEARING

BEFORE THE

SUBCOMMITTEE ON EMERGENCY PREPAREDNESS, SCIENCE AND TECHNOLOGY

OF THE

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DHS'S SCIENCE AND TECHNOLOGY DIRECTORATE: IS IT STRUCTURED FOR SUCCESS—

Thursday, September 7, 2006

HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOMELAND SECURITY,
SUBCOMMITTEE ON EMERGENCY PREPAREDNESS, SCIENCE AND TECHNOLOGY,
Washington, DC.

The subcommittee met, pursuant to call, at 10:17 a.m., in Room 334, Cannon House Office Building, Hon. Dave Reichert [chairman of the subcommittee] presiding.

Present: Representatives Reichert, Pearce, Dent, Pascrell, Lowey, and Etheridge.

Mr. REICHERT. [Presiding.] Good morning. The Committee on Homeland Security's Subcommittee for Emergency Preparedness, Science and Technology will come to order.

The subcommittee will hear testimony today on proposals to restructure the Department of Homeland Security's research and development arm, the Directorate of Science and Technology.

Before we begin, let me first welcome our distinguished witness, Rear Admiral Jay Cohen—thank you, sir, for being here; congratulations—Department of Homeland Security's new undersecretary for science and technology.

On behalf of the committee and my colleagues, we would all like to welcome you today for your first appearance before Congress since your confirmation by the Senate on August 3rd, I believe.

Undersecretary Cohen, I know I speak for many and we thank you for coming out of retirement to join the Department of Homeland Security. You have served our nation with distinction for 35 years in the United States Navy and bring to the Science and Technology Directorate an extensive depth of leadership, experience and proven technology credentials.

There is no doubt the directorate is fortunate to have such an accomplished, capable leader. And we sincerely hope that you will be successful at the Department of Homeland Security, as you were in your successful career, five-year tour of duty as chief of naval research.

When most people think about homeland security, they think of police officers, they think of firefighters and emergency medical technicians, not usually academics, scientists or engineers. They think of police stations and firehouses and ports and border cross-

ings, not usually laboratories, think tanks, universities and technology companies.

They think of the courageous public servants who put their safety at risk to protect our lives and our property, not the technology that enables them to do their job most effectively and efficiently.

That is precisely while the hearing this morning will focus on the effectiveness and the structure of the Department of Homeland Security Directorate of Science and Technology, the department's research, development, testing and evaluation arm.

Until Congress and the administration established the Directorate of Science and Technology in the Homeland Security Act of 2002, there had never been a dedicated research, development, testing and evaluation system for first responders.

Unlike most of the department's other components, the directorate is not a legacy agency. Its establishment in March of 2003, therefore, was a watershed event for our nation. Yet given the relative newness of S&T Directorate, it has not surprisingly encountered more than its usual growing pains.

Indeed, during the past 3 years, Congress has grown increasingly frustrated with the directorate's performance. The litany of complaints is long, and I will just list a few of the criticisms that have been leveled. And I am sure they are not going to be new for Mr. Cohen.

So, number one is the lack of transparency in strategic planning; number two, providing inadequate detail in its budget justifications; third, systematic deficiencies in its financial and accounting controls; and four, poor response to the needs for its customers and end users; and lastly, failing to more rapidly develop and adopt currently existing technologies for homeland security purposes.

As a result of these and other problems, real or perceived, many in Congress and elsewhere have lost confidence in the ability of the Science and Technology Directorate to fulfill its statutory responsibilities.

This hearing comes at a pivotal time in the Science and Technology Directorate's brief three-year history.

Mr. Undersecretary, with your recent confirmation, you are now in the hot seat. Today, my colleagues and I would like to learn how precisely you plan to fix some of the problems that we have mentioned and inspire confidence in the ability of the directorate to develop and disseminate technologies that will help our nation's first responders prevent, prepare for, respond to and recover from acts of terrorism, natural disasters and other emergencies.

Mr. Undersecretary, during your nomination hearing before the Senate Committee on Commerce, Science and Transportation, you stated that, "In the war on terrorism technology can mean the difference between life and death, victory or defeat."

As a former first responder, I couldn't agree with you more. Technology is a critical force multiplier. And speaking from experience, it can be the difference between life and death for cops, firefighters, emergency medical technicians and many, many others in our community.

So as we close in on the fifth anniversary of the attacks of September 11, 2001, we are eager to hear your plans for ensuring that

our nation continues to maintain its scientific and technological advantage over some very determined adversaries.

This is far from the first hearing that the subcommittee will hold on science and technology issues, and it certainly won't be the last. So with that in mind, I look forward to your testimony and to working with you in the future to make the directorate as effective as possible.

The chair recognizes the ranking member, Mr. Pascrell, for his statement.

Mr. PASCRELL. Thank you, Mr. Chairman.

I want to thank my good friend and colleague, Chairman Reichert, for agreeing to hold this important hearing.

And I want to welcome Rear Admiral and Undersecretary Cohen, and thank you for your service to your country. I think I speak for all of us when I say that we look forward to working with you in a robust manner. This is a very robust subcommittee.

We understand how critical your work is, and we know that improving the Science and Technology Directorate at the department is a matter of profound and urgent necessity.

As you are no doubt aware, Mr. Secretary, this hearing comes at a time of great dissatisfaction from many of the members on both sides of the aisle, across the House and the Senate, who have grown increasingly frustrated with the directorate in recent months. We all sense a feeling of urgency. I am being charitable, to sum up all of the things that we have gone into.

The Washington Post noted just recently that the S&T Directorate is "hobbled by poor leadership, weak financial management and inadequate technology."

That article noted that the S&T had struggled with turnover. We have had that problem in many, Mr. Chairman, many of the departments within Homeland Security—reorganizations, beyond how much we can count even, and raids on its budget since it was established in 2003.

The Senate Appropriations Committee recently expressed its extreme disappointment with the manner in which S&T is being managed within the Department of Homeland Security. You are taking on an alligator here.

Despite the efforts of the acting head of S&T, this component is a rudderless ship without a clear way to get back on course. That came out of the Senate Appropriations Committee.

So many of us, also, are disturbed by the lack of transparent strategic planning, inadequate details in the budget justification, and deficiencies in the financial and accounting controls.

And then there is the organization of the directorate itself. Several months ago, senior directors of the S&T Directorate briefed committee staff on a reorganization of the directorate. At the time, those officials told the staff that a reorganization of the directorate had already begun and that the current structure no longer bears any resemblance to the official department organizational chart.

In recent weeks we have heard that the particular reorganization has fallen out of favor. So here we go again—if that is true.

In a briefing to committee staff, Undersecretary Cohen announced his intent—you announced your intent to set aside the old

reorganization plan and proceed with your own, as I understand the meeting went.

All of these reorganizations beg the question: What does the Science and Technology Directorate look like today— What vision will be implemented— How long will it take for these changes to become effective— How effective can the department be with all of this shuffling— These are the questions that we would like to hear answers to today.

But fixing the problems of the S&T Directorate go beyond short-term operational fixes. A variety of advisory councils and GAO reports have noted significant problems within the directorate.

For example, the directorate needs to develop a broad strategic plan. GAO is right on target, as they usually are.

The directorate must better redefine or define its relationships with national labs and executive agencies to avoid duplication of efforts.

The directorate must develop a robust procurement system that can readily provide information about the obligations and the unexpended obligations associated with each contract.

And the directorate must improve its efforts in developing a prudent business model. They must provide breakdowns and justifications of funds—to private-and public-sector facilities.

It is ironic, you know, 3 years later, we are still talking about pretty basic stuff here.

The directorate must also improve its personnel system, strengthening the workforce recruitment and retention program, create a culture of responsibility with its managers.

The undersecretary doesn't have an easy job; I don't think you do. This committee has spent some time, also, on discussing our relations with our allies in developing science and research and research and development. I think that is critical. I think it is important.

There isn't a part of Homeland Security, from intel down to our good friends at TSA, there isn't one aspect of this that isn't affected by what we are going to be doing here, what you are going to lead us to do.

So I welcome you. I look forward to hearing your proposals, and I want to certainly commit ourselves to working with you.

And, Mr. Chairman, before I yield back, I know this issue is extremely important to Congresswoman Loretta Sanchez. Unfortunately, due to a prior commitment, as we all have, she can't be here today. I ask unanimous consent to submit her written statement.

Mr. REICHERT. Without objection.

[The statement of Ms. Sanchez follows:]

NOT RECEIVED BY COMMITTEE

Mr. PASCRELL. Thank you, Mr. Chairman.

Mr. REICHERT. Thank you, Mr. Pascrell.

Others members on the committee are reminded that opening statements may be submitted for the record.

The chair now calls our panel, its sole witness, the Honorable Jay Cohen, undersecretary for science and technology, U.S. Depart-

ment of Homeland Security. The chair recognizes the undersecretary for his testimony.

STATEMENT OF HON. JAY COHEN, UNDERSECRETARY FOR SCIENCE AND TECHNOLOGY, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. COHEN. Thank you, Chairman Reichert and Ranking Member Pascrell and the distinguished members of the committee. I will tell you that it is an honor to be here today and to discuss the Department of Homeland Security Science and Technology Directorate.

I appreciate very much your invitation to discuss my vision for and the realignment of the directorate to better meet the mission needs of our customers, that being the DHS components, and, as Jack Walsh would say, the customers of our customers, most important, the first responders and men and women that S&T enables to make the homeland safer.

I am honored and privileged to serve with the dedicated men and women, scientists and engineers and professionals who are working to secure our homeland and defend our freedoms. Science and technology is a critically important enabler, and I am honored that so many of them would join me at this hearing today, and they sit behind me.

The S&T Directorate has a significant role in bringing to bear solutions to the department's homeland security challenges. During my tenure at the Office of Naval Research, especially after the tragic events of 9/11, I learned first-hand the incredible value that a sustained, customer-focused, balanced, basic and applied research program adds to America's ability to bring advanced technology to our and our allies' asymmetric advantage against the enemies of freedom.

It can mean the difference between life and death, victory and defeat, as the chairman has already noted from my confirmation hearing. Ladies and gentlemen, we are at war today, and there is no time to waste.

President Bush noted the importance of science and technology in July of 2002 when he discussed the creation of the Department of Homeland Security: "We will harness our science and our technology in a way to protect the American people. We will consolidate most federally funded homeland security research and development to avoid duplication and to make sure all the efforts are focused."

The S&T Directorate's enabling legislation—and I salute the Congress for that visionary legislation; it took enormous courage—the Homeland Security Act of 2002, by creating the S&T Directorate and defining the mission, recognizes the importance of robust science and technology.

I intend to move the organization forward by streamlining processes, improving accountability and empowering people to conduct the important work of the directorate.

I might add that you have heard those kinds of words many times before. I would just ask that you judge me on my actions, not on my words. I will be available to you and expect to be held accountable, as I have been accountable throughout my life and my career.

I was sworn in on the 10th of August by Secretary Chertoff. That was the day that the British Airways plot broke, and it has been quite a ride ever since. And I my sense is that it won't let up in the time that I am on board.

In the short time that I have been on board during the August recess, I have had the privilege to work, Chairman Reichert, with your staff and also, Congressman Pascrell, with your staff in a bipartisan, nonpartisan way. In fact, I have had a chance to sit down at length with the committee staff of six of the seven committees that I deal with in both houses, and authorizers and appropriators, and have received good advice and consult from them. And we are very well-served by their service.

I would ask that the rest of my remarks be made part of the record, because your time is most valuable, and I would like to use this precious time to share with you my plans for the realignment of the directorate, so that we can be effective and address all of the issues that have been raised.

[The statement of Mr. Cohen follows:]

PREPARED STATEMENT OF JAY COHEN

Good Morning Chairman Reichert, Ranking Member Pascrell, and distinguished Members of the Committee, it is an honor to be with you today to discuss the Department of Homeland Security (DHS) Science and Technology Directorate (S&T Directorate). I appreciate your invitation to discuss my vision for and realignment of the Directorate to better meet the mission needs of our customers - the DHS Components; and the customers of our customers - the first responders and men and women that S&T enables to make the Nation safer.

I am honored and privileged to serve with the dedicated men and women, scientists, engineers and professionals who are working to secure our homeland and defend our freedoms.

The S&T Directorate has a significant role in bringing to bear solutions to the Department's homeland security challenges. During my tenure at the Office of Naval Research (ONR), especially after 9-11, I learned first hand the incredible value that a sustained, customer focused balanced basic and applied research program adds to America's ability to bring advanced technology to our (and our allies) asymmetric advantage against the enemies of freedom. It can mean the difference between life and death, victory and defeat.

President Bush noted the importance of science and technology in July of 2002 when he discussed the creation of the Department of Homeland Security ″We will harness our science and our technology in a way to protect the American people. We will consolidate most federally funded homeland security research and development, to avoid duplication, and to make sure all the efforts are focused.″

The S&T Directorate's enabling legislation, the Homeland Security Act of 2002, by creating the S&T Directorate and defining the mission, recognizes the importance of robust science and technology. I intend to move the organization forward by streamlining processes, improving accountability and empowering people to conduct the important work of the Directorate.

The S&T Directorate's mission is to protect the homeland by providing Federal, State, local, and Tribal officials with state-of-the-art technology and resources. There are strategic objectives to fulfill the Directorate's mission:

- Develop and deploy state-of-the-art, high performance, affordable systems to prevent, detect and mitigate the consequences of chemical, biological, radiological, nuclear and explosive (CBRNE) attacks
- Develop equipment, protocols, and training procedures for response to and recovery from CBRNE attacks
- Enhance the technical capabilities of the Department's operational elements and other Federal, State, local and tribal agencies to fulfill their homeland security related missions
- Develop methods and capabilities to test and assess threats and vulnerabilities, and prevent technology surprise and anticipate emerging threats

- Develop technical standards and establish certified laboratories to evaluate homeland security and emergency responder technologies, and evaluate technologies for SAFETY Act protections
- Support U.S. leadership in science and technology

To accomplish this mission and be successful we need to make changes to mature the organization, as pointed out in the language in both the Senate and House 2007 appropriations committee reports. I intend for the Directorate to become an organization that is a customer focused, output oriented, a full service organization as envisioned in the enabling legislation that must be cost efficient, effective, responsive, agile, and flexible. To advance the organization I intend to make the following adjustments which I call ″The 4 Gets″.

Get the Organization Right

The House Appropriations Committee Report calls for S&T to develop and implement a new business model to fix the Directorate's challenge to ″adequately convey its role or how it supports the mission of DHS component agencies″. To put it simply, S&T needs to be relevant. The best minds in public sector, private sector and academia have been working diligently to bring solutions to many of the challenges facing DHS. However; under the previous construct the organization was aligned by executing entity , who was doing the work. Our DHS Customers need an organization that is easier to access in order to utilize technologies and solutions that will make their jobs better, more efficient, more cost effective, and safer. The S&T Directorate needs to be more accessible in order for the DHS Components to leverage the value added of the good work the men and women of S&T are bringing to the fight.

However, I don't believe rearranging boxes, in-and-of-itself, will make an organization relevant. For that to happen there needs to be a change in organizational culture. The Directorate must become a model service organization focused on its customers. It cannot be isolated and removed from them. DHS S&T must engage its customers in setting priorities, defining requirements, determining capabilities needed and evaluating performance. In other words, defining what we will do for our customers, how we will do it, and how we will measure success.

My goals of the realignment are:

- Accelerate the delivery of enhanced technological capabilities to meet the requirements and fill the gaps of DHS agencies to ensure the successful accomplishment of their missions
- Establish a lean and agile, federally staffed, world class, S&T management team, consistent with DHS enabling legislation/law, and proven, successful research organizations, to develop and deliver the technological advantage necessary to ensure DHS Agency mission success, and prevent technological surprise.
- This organization must be able to span basic research thru advanced technology/prototypical demonstration to satisfy government leadership direction, customer agency requirements and emergent real world developments.
- The resulting accountable organization will be able to effectively, efficiently and objectively develop, execute and justify budgets and programs which achieve the desired mission goals
- In conjunction with other public and private institutions, proactively provide leadership, opportunities and resources to maintain and develop the necessary intellectual basis for a national S&T workforce and focused research disciplines that will ensure the safety of our homeland

The S&T Directorate will be aligned in six Divisions along enduring disciplines that will enable the Directorate to have sustained and meaningful impact for our Customers. The divisions and disciplines and examples of portfolios/programs within them are:

- Energetics - i.e., Aviation Security; Mass Transit Security; Counter MANPADS
- Chem/Bio - i.e., Chem/Bio Countermeasure R&D; Threat Characterization; Ops; and Agro-Defense; Bio-surveillance , Response & Recovery
- C4ISR- i.e.,(Information management, information sharing, situational awareness) - i.e., Interoperability and Compatibility; Intel/ Info sharing, Screening, Cyber Security R&D
- Borders/Maritime - i.e., Land Borders, Maritime/USCG, Cargo
- Human Factors - i.e., Social-behavioral- Terrorist Intent, Human response to Incidents, Biometrics
- Infrastructure/Geophysical Science - i.e., Critical Infrastructure Protection, Regional State and Local Preparedness and Response, GeophysicsEach Division would have at least one Section Director of Research and a Section Director of Transition who would work with the Directorate's Director of Research - (fo-

cused on Research which will also house the University Programs including Centers of Excellence) -- and Director of Transition (focused on Applications) respectively. The Director of Transition will coordinate within the Department to best expedite technology transition.The Director of Innovation (HSARPA), as specified in the law will ″Support basic and applied homeland Security research to promote revolutionary changes in technologies; advance the development, testing and evaluation, and deployment of critical homeland security technologies; and accelerate the prototyping and deployment of technologies that would address homeland security vulnerabilities″ and will work with each of the Division heads in doing so. HSARPA will also work with each of the Division heads to accelerate technology transition.This structure will allow a healthy balance between research and applications, risk and time to delivery. Investments will span across Transition Readiness Levels (TRL), including short - term (under 3 years); mid- term (3-8 years); and long term (over 8 years). This push and pull between research and application as well as tension over applied research resources will allow for a balanced portfolio of investment.In addition to the Divisions the organization will have additional components:

- Reporting to the Director of Research, the Office of National Laboratories would be responsible for the coordination and utilization of the Department of Energy national laboratories, Plum Island Animal Disease Center and National Bio-defense Analysis and Countermeasures Center.
- Reporting to the S&T Chief of Staff, the Business Operations and Services Directorate would serve as a centralized service organization and house Human Capital, Security, Acquisition, CIO and Facilities and Logistics.
- There would be a Director of Test and Evaluation and Standards.
- The Director of S&T Special programs would oversee the S&T Directorate's highly classified projects.
- A Director of Government Agency and International Liaison would help facilitate government-wide S&T coordination and provide outreach to our allies.
- Reporting directly to me would be Homeland Security Institute as well as CFO, Counsel and Corporate Communications.

A new organization is only as good as the people you have working in it which brings me to the next ″Get″.

Get the People Right

The S&T Directorate has resources across public sector, private sector and academia; I refer to this as the Homeland Security Research Enterprise. Thanks to the enabling legislation, we have the ability to leverage DHS labs, DOE's National Labs, Homeland Security Institute and the DHS Centers of Excellence. Additionally we utilize other agencies' resources including DoD, NIST, HHS, USDA, EPA, NSF, DoD FFRDCs, industry, international partners and stakeholder associations.

I will enable the best and brightest - scientists, engineers and professionals (associates) - to meet the mission and take a holistic approach to fill technology capability gaps of the Department.

Because the S&T Directorate will be output driven we will have a healthy balance between research and applications. This diversity will be mirrored in the skills and expertise of our people. We will have matrixed staff across the Divisions that will focus on research and on transition.

Once we have the organization structure and the people in place, we need the tools and processes to ensure accountability.

Get the Books Right

The S&T Directorate will execute appropriations as intended by Congress. We will also be fiscally accountable to our DHS Customers, the Congress and the American people.

The S&T Directorate CFO, Richard Williams reported onboard with me. He comes out of the DHS Program Analysis and Evaluation Office to help put in place the systems and protocols to enable S&T Directorate to be fully responsive and transparent in the development, presentation and execution of the budget.

The next step is to get the focus of the work aligned to better enable the customer.

Get the Content Right

My years at ONR have taught me that an R&D organization must take to heart customers' insights, priorities, and goals. Too often those in science and technology fields say ″we know what you need″. They do research because it is interesting and holds potential for future capabilities not because it meets a specific goal or objective. While this type of unfettered scientific research is important the S&T Directorate must also focus and prioritize resources to be output oriented and customer driven. We must set our priorities to align with National and Department of Home-

land Security priorities. S&T's work will be targeted at enhancing capabilities and customers needs.

Last year, as Secretary Chertoff was rolling out his second stage review, he emphasized the need of the Department to focus on risk. ″We cannot protect every single person against every single threat at every moment and in every place. We have to, with our finite resources and our finite employees; be able to focus ourselves on those priorities which most demand our attention. And that means we have to focus on risk. And what does that mean— It means we look at threat, we look at vulnerability, and we look at consequence.″ The S&T Directorate will endeavor to fulfill risk based needs of our customers. This will be accomplished by enhancing the Customer's operational capabilities.

The Four ″B's″

To quickly capture and articulate broad risk based priorities, I internally refer to them as the ″4 B's″:

- Bombs,
- Borders,
- Bugs (Biological) and
- Business - (protecting the processes that make our economy function).

To meet these priorities, the S&T Directorate will work with our customers to better focus our research and enable our customers in order to better secure our nation in those core areas.

To ensure customer product alignment, the S&T Directorate will utilize Integrated Products Team (IPT). These IPTs will be customer led. DHS Management will be included for Acquisition expertise/ involvement. An S&T Division Head will be a team member, as will, when appropriate, the end-user. Test and Evaluation will be an important part of the IPT process to ensure that products and capabilities we deliver will meet the customers' and first responders' needs.

The S&T Directorate will restructure its investment portfolio to create a balance of potential project success , cost, impact and the time it takes to deliver. To achieve that balance there needs to be a healthy tension between Research and Applications. We will work projects that are across the spectrum of Transition Readiness Levels (TRL). Our investment portfolio also has to be prioritized across long-term research, mandated spending, product applications and leap ahead ″game-changing″ capabilities. I look forward to working with you and your staff to get the right mix for the S&T Directorate investment portfolio.

My goal is that, as a result of this S&T Directorate realignment, when the President's fiscal year 2008 budget is sent forward to Congress, this Committee, and the Appropriators, will see that DHS S&T is a more responsive, agile, customer-focused organization, one that better enables our nation to prevent, protect, respond, and recover from acts of terrorism, natural disasters or other emergencies.

Thank you for the opportunity to discuss the realignment. I would be pleased to address any questions you may have.

Mr. REICHERT. Well, thank you, Undersecretary.

I will start just by asking, first of all, have you received approval for your organizational proposal from Secretary Chertoff—

Mr. COHEN. Yes, sir, I am pleased to share with you, because of the efforts, as I said, of working with the congressional staff, working with my leadership team in the S&T directorate, working with Deputy Secretary Michael Jackson and Secretary of Homeland Security Chertoff and others, that yesterday at noon, high noon, Secretary Chertoff approved the realignment that you will see presented here.

Nothing is perfect. It is not about moving the boxes around, and I address that in my statement. It is about the people. We are going to talk about what makes this work. But this is a proven model.

Ladies and gentlemen, I am not a scientist, and I am a shade tree engineer, I am a New Yorker, so I am tough. I can take the criticism and thrive on the challenge.

But this will be a work in progress, as long as we have the agile, devious, heinous enemies that we face in this war on terror.

And so, the short answer, Mr. Chairman, is it has been approved. I will put that in an organizational manual so there will be no question within my directorate of what the roles and the responsibilities are. But that will follow the product line that we hope to kick-start by this realignment.

Mr. REICHERT. Could you touch on just some of the highlights of your proposal—

Mr. COHEN. Yes, sir.

First of all, if I may, Bob Hooks, who is my acting chief of staff and was involved, has been at the directorate for some time, was involved, Congressman Pascrell, with the reorganizational attempts of the last many months and has been intimately involved with this, and he will help me with the posters.

I just wanted to make sure everyone was reminded—and I know I don't have to remind this committee, but it is terribly important, I think, to understand why we are here, why we have the Department of Homeland Security—the heinous events of 9/11 and the attacks that have followed.

At the end of the day, why are we here and who do we enable— It is the customer of the customer. It is the first responders; it is the state; it is the local; it is the tribal; it is the people at the pointy end of the spear.

I believe when we are successful—and ladies and gentlemen, we will be successful in S&T; we don't have any other choice. Six years ago when I was asked to be the chief of naval research in the Office of Naval Research, a very mature S&T management organization—and that is what my directorate is in Homeland Security.

We do not do S&T. We manage S&T, and we do that from basic research to applied research and advanced technology. But we are not a laboratory. We enable the scientists and the engineers to do what they do and then bring it to the customer.

But I was asked to take the Office of Naval Research and make it more relevant for our customers in the Navy—those are the systems commands who buy and deliver the ships, the airplanes, the tanks for our Marines, et cetera—and to focus on the customer of our customers; their being the sailors and the Marines in harm's way.

You can see the parallel with Homeland Security where my customers are the agencies and the activities within Homeland Security—and we will talk about those in a minute—but then the customer's customers being the first responders.

So I believe from science and technology will flow security and trust for our nation.

Now, what guides me— Well, I have encapsulated it into what I call the "four gets" and the "four B's."

If we are going to be successful I must get the people right. And, ladies and gentlemen, we have world-class people. There has been turnover in the directorate. There has been turnover in the department. But I can tell you I am joined by many people here today who are leaving high-paying civilian jobs, coming from other government jobs, because they want to serve. They believe the threat is real, and as they have told me this is about their children, their grandchildren and their neighbors.

I had one individual who previously served with me, no longer in government service, who told me he was turning down a $500,000-a-year job to come on board in Homeland Security—we will talk about his role in testing, evaluation and standards as we go through this—because when his neighbors in southern Maryland heard that he would have the opportunity to serve in Homeland Security and make their neighborhood and our country safer, how could he turn that down—

Now, I will tell you most of my neighbors have asked for handwritten notes so they don't have to take their shoes off as they go through the screening. And I can give them those notes, but regrettably, it serves no purpose. I have to take my shoes off also.

So the people are critically important. We must get the books right.

I am joined today my Dick Williams, who is sitting behind me. He came on board the 10th of August at the direction of Secretary Chertoff. He comes from a background at naval reactors. All of you know the nearly 60-year history of naval nuclear reactors and its demands for accuracy, precision and accountability. And he comes by way of 3 years at the leadership position in Homeland Security of the plans and requirements branch.

He has already engaged with me in our staff briefings of all the committees, and we have made our books transparent. We have taken deep dives down to the lowest levels. A lot of the information was there. Why it wasn't presented previously or presented in a manner that was accountable remains to be seen.

But we have already set a very high standard, and I think the feedback from your staff should substantiate that. But we will continue that. And we will have one set of books. And you will see how the organizational construct takes us there.

We have to get the organization right. Ladies and gentlemen, I can get product out of any organization, no matter how dysfunctional. But it is enormously beneficial if the organization is aligned to the customer and the provider. When you go to the yellow pages of S&T Directorate and you have a need, you know where to go, and we make it one-stop shopping.

So all of these are additive. And finally I have got to get the content right. The research that we are doing has to be applicable to the threats that we are facing. And we will talk more about risk, tolerance and timelines that determine what that content is. And, Congressman Pascrell, that goes to the strategic plan concept.

And so, as I was getting ready for my confirmation, I looked at the challenges that I might have, and I just made those the "four B's"—I like people to be able to grasp what we are trying to achieve—and those are bombs, borders, bugs and business.

Now, I would have liked to put "containers" in there, but it didn't start with a "B." But I have got really smart people, and even the staff said, "Well, what about boxes—'" It was a little bit too plebian. And, oh, by the way, "containers" fit in many of these areas.

Now, as you look at this, you are probably saying to yourself, "What is this business thing— I understand bombs. I understand borders. I understand bugs." Well, ladies and gentlemen, we live in a high-tech society, and I was reading in USA Today the other

week that we have a negative savings rate in this country. If the bad guys go after our ability to use our ATM, if they go after our ability to transfer funds, to make stock trades, those are the sinews of business in our country today. They are critically important.

And so it is not just about the visible challenges we have; it is the cyber and the process challenges that we have. And that is what I have tried to capture with business.

So what are the overarching goals of the realignment— I have put them in my opening statement. I think they are more eloquent in there, but I will try and capture them as best as I can.

Number one is to create a customer-focused, output-oriented, full-service S&T organization.

Number two, because I am a political appointee, I come and go as administrations change. That is our system. We must establish, learning from the experience over the last 3 years, a government service manned organization that can create, execute and justify the budget. Because that is what you do in Washington. You are doing those three things simultaneously.

And it must be on mission-oriented programs, so that when I move on, we don't have these enormous swings. This is about the defense of our homeland. It is far too important to let things swing more than they have to with the normal turnover of people.

And finally—and I salute you so much—one of my guidelines and the principal guideline in this organizational construct was the 19 pages of the enabling legislation, out of 187 pages, for the S&T Directorate in the Department of Homeland Security.

And I have read this and reread this, and I think you will find—and I have discussed it with your staff—that we have accounted for and included all of the very important and serious responsibilities that you have tasked my directorate with.

But one area—and you had great vision here. And this is one of the strengths of America—we are optimistic. We believe in the future, and we understand the value of sustained investment in basic research. You don't know what you don't know, and you have got to go up a lot of alleys to figure out which ones are blind. Einstein said, "If we knew the answer, it wouldn't be research."

I believe from my service in the Office of Naval Research that the Congress passing the Bayh–Dole Act nearly a quarter of a century ago is in large measure responsibility for unleashing the invasion and the intellectual prowess of our universities, our students and our researchers, and in large measure we owe our economic viability to that. And that is critically important to us in the future.

It is no surprise to you that we are in crisis in many of our schools. In the middle schools, children, boys and girls, are turning away from math and science. We must turn that around. Bill Gates has addressed that. The Congress has addressed that. We have caucuses on that. The administration has addressed that. This is critically important to our economic welfare.

And so the synergy is in your tasking to me to be a leader in basic research and invest properly and wisely with a focus on Homeland Security mission areas. It is extremely important. And even though I am just an old naval officer and not a scientist, I believe strongly in this because it is about our future, and I am absolutely committed to that.

So, let's get into the organization. I believe it is all about the mission and the budget. And if I follow the budget, everything else flows from that.

If I only had one slide, one poster, to use to describe my philosophy and where we are going, it would be this one. I must in my duties balance risk, from low risk to high risk; that means risk of success; cost, low to high; the impact that it will have; and finally, the time of delivery. These are the variables that I deal with.

And the Congress has been very kind to S&T across the government and understands that S&T is the only place where we are not only authorized but encouraged to take risks. Small investments in the precise measurement of time—in 1975, $75,000 gave us global positioning. In 1990, a game changer, a transistor to the wireless world we live in today. Einstein's E=mc2 and nuclear power—ideas matter; research matters.

We must be customer-focused. We must be output-oriented. You will continue to hear those from me. Now, there are people who think that customer-focused and output-oriented is mutually exclusive with a robust investment in basic research. They are not. They are complementary. And I think you will see how they flow one into the other.

But because you allow me to take risk in S&T—and with risk comes the chance of failure, but also comes the opportunity for great success—I believe that by putting millions at risk, I am saving billions in acquisition from being put at risk. And that is the model that I have used.

So if we can go through this chart, I think you will see how everything else flows organizationally.

In the upper left-hand corner, this is the output function. This is product transition. This is the here and now. This is focused on delivering to the acquisition community and my customers, the directorates and agencies within Homeland Security, the product enhancements they need for the hundreds of millions, nay, billions that they will be spending.

This is customer-controlled. I use an integrated process team. This is not sporadic. This is a continuous process that has oversight.

And, ladies and gentlemen, on the output function of science and technology, we have metrics. I say again, we have metrics. And the metrics are the costs, the schedule and the capability or technology readiness level to answer the needs of the customers. This is the majority of what I do.

If you then go to the right, the first block is medium to low risk. This is when you go to Best Buy and you had a three-megapixel camera and now, for less money, a five-megapixel camera is available. That is what we are talking about in a spiral-development, acquisition-focused enhancement.

Next, you go to innovative capabilities. I view this in the time frame of 2 to 5 years. This is high-risk; this is high-payoff. This is where the Congress had the wisdom to incorporate in my directorate the HSARPA organization. This is innovation. If we get this right, these are game changers. This makes acquisition uncomfortable because it challenges their assumptions. It is the better way of doing business.

And, ladies and gentlemen, our successful large and small businesses in this country that give us the iPod and give us so many other things—create jobs, create wealth—they get this. And we have to be able to do this in government.

And you have provided in legislation for prototyping, testing and development. That has a high probability of success, but failure can occur. But we learn from that failure.

In the lower left-hand block is basic research. This is an area where we are planting 1,000 flowers. From those 1,000 flowers, we harvest 100 projects. From the 100 projects, we then go into two or three prototypes. And from those two to three prototypes, we get the George Foreman grill. We get the profit-maker.

Now, that makes a lot of managers really uncomfortable, because 1,000 flowers is basic research, unfettered. You may not see the results for 8 or 10 years or ever. The 100 projects is in this time frame, and the prototypes transition there to give you the profit-maker.

Now, every boss I have worked for and every industry I have talked with has made it clear. They want one flower to result in one project to give you one prototype to give you one profit-maker. Oh, that that could be. But they seek discovery and invention, and scientists and engineers understand that it moves at its own pace. It is not a pretty process, the scientific method.

But if we don't invest there, I guarantee what we will get in 8 years: nothing. If we do invest and we invest wisely, we will continue the wonderful innovation and economy engine that we enjoy in this country.

And I know what the bells mean.

Mr. REICHERT. Mr. Undersecretary, if I could interrupt. We are going to continue. We do have a vote, it sounds like, here.

Maybe in the process of answering some questions that the numbers might have, you could touch on some of the other initiatives in your plan.

I testified before a number of hearings in my own community as the sheriff in our county council, as it is called in Seattle. And it is sometimes frustrating, as the witness, to have all this information and want to impart it all and then be told that we would like to ask you some specific questions.

So if we can go to Mr. Pascrell, and hopefully you might be able to touch on some of your other initiatives as you answer questions.

Mr. COHEN. My pleasure, sir.

Mr. REICHERT. And we will come back. Yes, we will come back.

Mr. PASCRELL. Mr. Etheridge cannot come back, so I will yield to him, with your permission.

Mr. REICHERT. The chair recognizes Mr. Etheridge for 5 minutes.

Mr. ETHERIDGE. Thank you, Mr. Chairman.

Undersecretary, thank you for being here.

You touched on a couple of things, and one of them was people, and no organization is much of anything without people. You know, you can have charts, you can have visions, but the quality of folks you have around you determines how successful you are to be, and you know that. And I have had that privilege in my career to work with a lot of fine folks.

My question is, though—and you knew this when you took the job, so it is not anything new—I think morale at the directorate is at a very low point, to be kind. That is pretty well common knowledge from what I had read. And it is very low, and there are literally dozens of vacancies in some very high-level positions.

So my question is—you touched on it, and I will give you an opportunity to expand on it—how will you improve morale within the directorate and attract the kind of high-level motivated workforce that everyone envisioned that would exist in the department when it was created— And some were there; many have left.

Kind of describe, if you will, some of the specific things you have in mind. I think that is critical if we are going to be successful. We can't be successful, I think, otherwise.

Mr. COHEN. Well, Congressman, you are exactly right. And I have a track record of being assigned throughout my career to situations very similar to this. You don't have a turnaround, I guarantee you, in one day. It requires a vision to be put in place. It requires a consistency of that vision and effort.

I will tell you I only serve with volunteers. On my very first day on the job, I met with all hands, voluntary. It was Friday in the summer. I didn't want people to come in. I laid out what my vision was. I was not prepared to brief, of course, this reorganization. That is something that we have worked on over the last 3 weeks.

I think the people in the S&T Directorate were suffering in part from reorganization fatigue. Whether this is a good or bad organization, I know it works, and I think the people have embraced it just because they want to get on with the process.

You have given me tools. Thank you so much for the DARPA-like IPAs, the Interagency Personnel Act, where I can bring in people from industry and elsewhere. I also have detailees who will come in from the national labs. We have people who will come from universities and centers of excellence, which likewise you have provided for.

But at the end of the day I must have within my full-time equivalent, my FTE limit, which you have been very generous with, that core, that cadre of government service people who perform inherently government functions to get it right.

So in the 3-plus weeks I have been on board, I have gotten approval for an organizational construct which works, which I am used to and which my customers and providers are used to from my 6 years at the Office of Naval Research. I am communicating with my people.

But at the end of the day they will feel satisfaction, or not, based on mission success of the directorate, the department and the nation, and what role they played in enabling that, and the respect and value that they believe that I and the rest of Homeland Security leadership and the customer places in them.

And I can tell you, Naval Research, in my last 2 years, I didn't defend my budget. My customer defended my budget to the chief of naval operations and the secretary of the Navy. I met with the commandant last night and the head of the Secret Service. I have met with Kip Hawley. They get it. As customers, they understand they are in the driver's seat.

And the more we do, the more they will want, the more the American people will want, and I believe we will see a very positive spiral.

But it is about leadership, sir.

Mr. ETHERIDGE. I couldn't agree more, and I look forward to it, because I think the longevity of it is going to be determined. You can bring people in. It is going to be about the people who are there who stay through thick and thin.

Let me go to one other point before my time runs out.

In the aftermath of the London liquid explosion terrorist plot that you alluded to earlier, some disturbing news was brought to light about the administration's priorities. According to the Associated Press, the administration's 2007 budget asked to take $6 million from the S&T's 2006 budget for developing explosive-detection technology and divert it to cover a budget shortfall in the federal protective services, which provide security around government buildings.

Now, that probably is an important priority. Don't get me wrong. But here is my question. It sets an example of what is important in this area and agency you are in.

As undersecretary of S&T, what steps will you take to ensure that the administration recognizes the importance of the R&D that takes place within your directorate— And how will you influence them to invest in real threat areas, which I think is critical—

Mr. COHEN. Well, Congressman, the facts of life are, in my opinion, that the threats—and this is true in warfare, it is true in medicine, it is true in police work—the threats far exceed the resources we have available, and so we must prioritize. We do that in our personal lives. We do that in government. And that is a balance.

Now, when we talk about the mandated spending block here, after the tragic events of 9/11—and we have an anthrax attack going on. We have airplanes being used as bombs. We didn't know what was going to be next. The Congress and the administration together looked at the risk of an event versus the consequence of an event.

And as I understand it—this was not my lane at that time. I was trying to save life and limb of Marines and sailors in the away game. The decisions were generally made,and they were funded this way, that chem, bio, nuclear and radiological, because of the consequences, should get immediate actions.

And I think great progress has been made there. But in doing that, other priorities, whether it was liquid explosives or improvised explosive devices here in the homeland, et cetera, then had to find their way.

What I hope to achieve and will achieve—you will see a little bit of it with the help of OMB in the fiscal year 2008 budget, but we are pretty far along. You will see it fully developed in the fiscal year 2009 budget—again, the staff has been very helpful—is to put in place the process—and much of this has come a long way already—to determine the risk versus the consequence and ensure that we don't leave any area uncovered. But it is always about setting priorities.

And I provided to the staff my brief on the liquid explosives. On day one of the job, I set up a rapid response team so that we could

focus on this. It involved the Transportation Security lab in Atlantic City. It involved my program managers and scientists. We had been working on 10 commercial off-the-shelf devices for over a year. In April, we had gone out with Small Business Innovative Research, a program that the Congress wisely provided. We had three additional devices. We are in the process of taking them to Socorro, New Mexico, to test them against real-world, Gatorade-sized liquid explosives.

And I went out with a request for information within the week, and I am pleased to tell you, ladies and gentlemen, that we have had 30 respondents come in with some exciting new technologies. And we paralleled that request for information with using the Safety Act that you gave me authorities to do to further encourage people.

So the short answer—and I obviously don't give short answers, I apologize—is that it is all about priorities. I will do my best, but I look forward to working with you and the staff to help me set those priorities.

Mr. ETHERIDGE. Thank you.

And thank you, Mr. Chairman.

And all I would say in closing, Mr. Chairman—I know my time has expired—is 2009 is a long time to wait for liquids. It is a long time.

Mr. COHEN. —I can't wait.

Mr. REICHERT. And the gentleman's time has expired.

Mr. PEARCE is recognized.

Mr. PEARCE. I thank the chairman.

And I would note that I was concerned when I read the reports of the A.P. story about the implication that the president was somehow taking money away from research that would have affected aviation and all. And as we looked deeper into that, we realized that the $6 million in question was not specific to aviation and was not going to be spent this year; that it, instead, was dedicated to improvised explosive devices, which I am familiar with, very familiar, because we do much of the research in New Mexico for the IEDs. And so we are doing quite a lot in that field already.

In the 2006 budget, DHS is spending over $700 million this year on aviation explosive-detection systems. And so I think the A.P. was somewhat misleading.

New Mexico is, Admiral Cohen—we are indebted to you, sir, because you were the naval research officer for New Mexico and worked on fresh-water systems, which in New Mexico is absolutely essential. Also helped bring the Magdalena Ridge astronomical observatory up to speed. And it is nice seeing you in this role, because we have seen you in New Mexico balance the needs of budgets and research.

I am not sure if you are familiar, but New Mexico really is the site of independent research, and I just recently in the last 60 days came across a small company there that is researching for on-the-border security. We are right on the southern border. The technology would work on either border, but they have established laser footprints, and then they have established sensors that would allow unmanned aerial vehicles, UAVs, to be circling overhead, interrogating these sensors on the border, detecting both chemical

and nuclear threats. Almost every chemical threat has a laser footprint that they have identified.

I have asked and they have said probably with $6 million or $7 million—and this is where your idea of what to invest in and where—with $6 million or $7 million they probably could make the technology for under $100 to interrogate every shipping container that comes into the U.S. for very, very small costs. Again, doing that with UAVs far offshore before it gets into the ports.

And these are the kinds of innovations that I think, Admiral Cohen, that America is looking to you to bring to the surface and to find these independent entrepreneurs out here who are solving the problems right now.

I know that if we unleash the imagination and, really, the innovative genius of America, we can fight off all of the attempts to destroy us. And I believe, like you do, that there are people out there who would categorically destroy us with no second thought.

And so, I appreciate your service in the past and look forward to working with you here on this particular initiative.

And I guess my question is: What kind of research are you seeing in the first days of your job that would help us secure both the northern and the southern borders— This is a very key area for New Mexico.

Mr. COHEN. Well, first of all, thank you for your very kind words. And I will follow up with your staff on this specific company. I was not personally aware—I am sure my people were—of the science of the laser footprints, although we were using similar things for the liquid explosives.

Mr. REICHERT. Mr. Undersecretary, if I could interrupt. I am sorry.

We were expecting someone to return to take my place so I could run and vote, and I don't think Mr. Pearce has voted.

Mr. PEARCE. I have not.

Mr. REICHERT. We are going to take a brief recess so that Mr. Pearce and I can vote and we can return.

Mr. PEARCE. That will be fine. I will have to read his answers. I have got a committee I need to start chairing again shortly, but we will look to the comments.

Mr. REICHERT. We have a minute and 30 seconds, I think, so—

Mr. PEARCE. Well, I am much faster than you, Mr. Chairman.

[Laughter.]

Mr. REICHERT. We will be right back. We are in recess.

[Recess.]

Mr. DENT. [Presiding.] I would like to bring to order this recessed meeting of the Subcommittee on Emergency Preparedness, Science and Technology.

I gave the chairman an opportunity to vote, and I would just like to ask a few questions of you, Mr. Secretary.

Mr. COHEN. Yes, sir.

Mr. DENT. My district has several academic institutions that are engaged in advanced technology research that may have some homeland security applications. These institutions need infusions of capital to help them with their projects from a theoretical stage of research, from the drawing board, if you will, to some type of application more to the practical.

In addition, I have been approached by many entrepreneurs and other inventors in my district who have ideas that will help us in our efforts to secure the homeland, but they need money to develop their ideas into something concrete and tangible.

I guess the big question I have is: What kind of effort is the S&T Directorate doing to assist these inventors, universities and think tanks to develop cutting-edge technologies that will help us in this global war on terror—

And at times I feel like I have a parade of people outside my office with ideas, and I really need help to direct them and their ideas in some way that is meaningful.

Mr. COHEN. Well, it is an excellent question. It is not limited just to your district or your good constituents.

And I might say, I spent many summers in Allentown where—

Mr. DENT. It is the center of the universe.

Mr. COHEN. —my relatives lived. I haven't been back to the new amusement parks. I look forward to doing that.

During my confirmation hearing in the Senate, one of the questions I was asked was, would I continue to have my open-door policy and be accessible to small entrepreneurs, the ma-and-pa's, as well as the large contractors, as I had been at the Office of Naval Research— And the answer is absolutely.

Because nobody has a monopoly on where good ideas come from, and you have given us the SBIR, the Small Business Innovative Research, dollars and processes to try and cultivate those ideas. You have also given me a robust budget to invest, and we have elected to do that in large measure through the centers of excellence, which I know is now looking at some legislative revision. I look forward to working with the committees to make that as right as we can, so that we are investing in the unfettered research in the universities.

But at the end of the day, there has to be a sense by the entrepreneurs that they will at least get a fair hearing and then have the monies available to be invested if we determine that there is a possibility of their idea developing into a successful application for a homeland security mission.

And so I have got many tools to do that. I will put that, as I did at the Office of Naval Research, Web pages in place, something that I call "technical solutions," where people could come in directly once we posted requirements that we had. The SBIR, we will have outreach, fairs in various districts around the country.

So at the end of the day, I have no shortage right now, sir, of people calling me at night, e-mailing me at home, sending me letters. And on the liquid explosives, we have already gotten 30 responses, many from small groups, that I now want to work with to develop that technology.

Mr. DENT. That is precisely the issue, that, you know, most members of Congress aren't the best people necessarily to vet these ideas. And we simply don't have the technical expertise.

But many of those small entrepreneurs are intimidated. You know, how do I approach this big bureaucratic model called the Homeland Security Department— And that is what the fear is. And how we can help them navigate this, I think, would make us all feel a lot better.

And I appreciate your openness and your accessibility to these ideas. Because if I am getting, you know, a parade outside my office, I can only imagine what the line is outside yours.

But another question I have is, what role, if any, does the Homeland Security Advanced Research Projects Agency play in all these efforts you just described—

Mr. COHEN. Well, to me—and it is one of my four quadrants. It is the upper-right quadrant.

Mr. DENT. And I have a hard time seeing the quadrant. I am sorry about that.

Mr. COHEN. The brief is in front of you, sir.

Mr. DENT. Yes. I have it here.

Mr. COHEN. That might be helpful.

But, to answer your question, sir, the Congress very wisely incorporated HSARPA in my directorate. I believe that that should represent about 10 percent of my budget.

You can take that as tithing, but that is what I did in Naval Research. I took 10 percent of the budget with the full approval of the civilian and military leadership, as well as the Hill, and we put that at risk for high-gain, high-risk game changers in a period, as you can see here, of 2 to 5 years.

These are prototypical. They are outside the acquisition system. They fast-track promising technologies. And they give us a capability that, in some cases, an order of magnitude better. And you can define that however you want: by sensors, by cost, by timeliness, by effectiveness.

But with the opportunity to do that comes the possibility of failure. I don't view failure in S&T as a negative. When you look at the scientific method and you look at the opportunities to gain, I don't do acquisition. I do science and technology. If I put millions at risk, it will save billions of acquisition from being at risk. So this will be a very robust area.

And, in answer to your question, 1 percent of my budget I intend to devote to what I will call home works—home works. In Navy, it was called swamp works. At Boeing, it is called phantom works. At Lockheed Martin, it is called skunk works. These are the highest risk. The probability of failure exceeds the probability of success. But, boy, it is such an asymmetric advantage if you get it right. And even if you don't get it right the first time, it tells you where you have to adjust your investment portfolio to then get that capability.

Mr. DENT. And I guess as a follow-up to that question, I spent some time out at the DNDO out in Nevada this past winter. And that was an issue that I noticed, that we are demanding a lot of technology. And, of course, we have to go through the scientific method. You just can't mandate science. You can't mandate a repeal of gravity. You have to work the process. And it is very frustrating for some of us, I know, in government.

But I think you drive your point home quite well. And the point is that millions in investment can save you later billions in acquisition. And you stated that quite well.

What effort is your directorate doing to make and to expand extramural research in developing that testing evaluation— What are you doing in that area—

Mr. COHEN. If I could just skip ahead very quickly, again, I believe the Congress wisely incorporated both test and evaluation and standards in my directorate.

Now, my S&T function is in the block just to the left. I currently have a T&E and standards group. I will provide a director for that as a direct report to me.

T&E is critically important to ensure that we don't buy no junk, and that we give to our customers and our first responders things that work and meet the specifications of the precious taxpayer-dollar investment. T&E is critically important.

Because we need to be agile, our enemy is agile, you will see a systems development approach in my organization, where we have a continuum between contractor test, developmental test and operational test. That is the start to the finish.

You know, so many of the things you see on "Headline News"—and this is a little frustrating—where good people bring prototypical devices and put it up against a bottle and say, "See, it says water. See, it says explosives. See, it says wine." When you take them, like Consumer Reports or Underwriters Lab, to an objective evaluation, you find out that they don't always perform quite as advertised.

Now, that is not bad. You just have to know it. Then we can work with them, tell them where it falls short, and then we can improve that.

Standards, likewise, need to be outside of the research portion of my portfolio, because if they are embedded in the research, they won't be objective.

And I have to deal with a span starting with the sheriff of Mayberry. If he has a catastrophe, he brings in the county police. Then you bring in the State Police. Then you bring in the National Guard. Then you federalize the National Guard. And, finally, here comes Northern Command with DOD forces.

As we scale up and we scale down, the standards for interoperability are critically important if we are not going to lose the common operating picture at each step in the way.

I am very familiar with NIST, National Institute of Standards and Technology. Arden Bemet, who is now with NSF, is a mentor to me. And we will leverage that to the maximum possible.

But I appreciate that responsibility that you have given me, and I take that very seriously.

Mr. DENT. And, just speaking of the visit to the DNDO, when you develop these technologies, how much thought are you giving into the overall architecture—

It is one thing to develop the technology. It is another thing that the guy at Border Patrol is able to utilize that technology or the Customs and Border Protection people can utilize that.

How much thought are you giving to the overall architecture and how that technology applies—

Mr. COHEN. What we do in S&T—and this is confusing and upsetting for people, because we are so optimistic in this country. And we believe, with enough money and enough time and enough focus, that we will cure cancer and we will cure AIDS. And if we say we are going to put a man on the moon, we put a man on the moon. I mean, that is who we are. That is our national culture.

But S&T can provide solutions and opportunities, some of which are breakthrough and change paradigms.

But at the end of the day, it is the customer, it is the organization that is tasked with fulfilling the mission, that picks and chooses the S&T to satisfy with cost concerns, time concerns, size concerns—there are a variety of criteria we use—to meet their needs.

And so I can propose and I can work and I can help resolve issues and standards, whether it is FAA or FCC, et cetera. But it is up to my customer, the operating agencies and directorates, to run with that ball. I just enable them. I can't do it for them.

And I think that is a misnomer that has been true throughout S&T for a long time. I can only take it so far, and then I have got to follow the customer. But I am going to enable the customer.

Mr. DENT. And my final question, and then I am going to hand the gavel back to the chairman: Do you think your directorate is doing enough to tap into the research proficiencies offered by colleges and universities, particularly those with the strong engineering and science departments, like I have in my district, like Lehigh University and others—

Mr. COHEN. The honest answer is I don't have enough experience in 3 weeks to tell you. I prefer not even to take that for the record, because I would be giving you an answer without experience. I would like to get back to you as we move forward.

My sense is we have a robust program, but it may not be aligned with the directorate and the department mission needs.

Mr. DENT. Well, thank you, Mr. Secretary.

Mr. REICHERT. [Presiding.] The chair recognizes Mr. Pascrell.

Mr. PASCRELL. Thank you, Mr. Chairman.

Before I ask some questions that I prepared, Mr. Secretary, I wanted to ask you this question. You talked about you didn't control labs when you were in the Navy. And then you talked about the public-private—you didn't use the word "partnership," but I will use the word "partnership."

Now, homeland security has become an industry. And when you review all the departments in Homeland Security, we have seen a lot of problems, a lot of trouble. And folks who created much of that trouble are gone now. So when we try to bring them before the committees, it is not easy to do.

You create an industry. Then the industry comes to your door step, writes us letters and says, "I got this thing that is going to blow your mind." Okay— Most of the time, it doesn't. But we want to extend the courtesy to that corporation, that company, that industry. But we want to do it the right way.

How are you going to prevent the retailing of science and technology— I think that is a danger. Maybe you don't.

And folks come to you with product, with idea. I don't think we should be adjusting the security to the product. I think that we should decide, we who are given that responsibility, like yourself, as to what that security should entail, and then what products do we need to do everything in our power to ensure the development within that specific area—

I mean, am I on the wrong trail here—

Mr. COHEN. Sir, I think you and I are in violent agreement.

At the end of the day, the administration, the Congress, for me, Secretary Chertoff, establishes strategic goals. We understand what our mission is.

We have a robust intelligence organization in this country, and with our allies that tell us what the most likely threats are. We have an overseas presence—

Mr. PASCRELL. And we prioritize those, as you mentioned earlier, you know, before.

Mr. COHEN. Yes, sir.

Mr. PASCRELL. Not everything can be on the same level. We think that we are more likely to get an attack this way, rather than that way, so now you got to deal with that within your privy.

Mr. COHEN. And honest people will disagree. This is not a political statement. You know, scientists, engineers, military people disagree where the attack may come from, et cetera.

And that is very complex. You do the best you can do. This is why it is an inexact science on the threat and in the intelligence side, as opposed to the scientific method that gives us the device to locate a specific explosive or specific threat.

But what I have done—and I am not going to get back to view graphs—is, as I look at my responsibilities and I look at the threat—and I gave you the "four B's," which is quite simplistic, but is pretty important to me, and from the body language, I could see a lot of nodding of heads—is, what I saw in the last 3 weeks in my directorate was, because of the focus on chem-bio and the focus on nuclear-radiological, et cetera—

Mr. PASCRELL. Right.

Mr. COHEN. —the good people in the directorate over the last many years have been trying to respond to that, get product out the door. And great progress has been made. We can talk about that offline.

But when you align to projects, it does exactly what you said, Congressman. As the projects evolve or change, and you have an agile enemy, every time you change you would have to realign.

So what you find in the most successful S&T management organizations is there are enduring areas to focus on. Those were different in the Navy than they were for the Army, than they were in Air Force. And that prevents the duplication of precious resource investment.

What Secretary Chertoff has approved has six departments. I believe these are enduring. They are not forever. They may wax and wane, but they are fundamentally what you will hear from me in the time. And I plan on being accountable and I plan on being here for as long as you will have me, or until you recommend I be fired—or—

Mr. PASCRELL. No. You are not the one.

[Laughter.]

Mr. COHEN. No. No. I want you to know, you know, I take my—I love accountability.

But energetics, things that go bang. That doesn't include nuclear, because, as you know, DNDO, we followed a model where it is cradle to grave because of the consequences there—

Mr. PASCRELL. But you understand the point, obviously, that I am driving at— And that is, we want to make sure that this is

transparent, this system. And we want to make sure that there is no collusion.

This is an easy way to have collusion, really, in what we are doing. I mean, we are just, you know—we just started this thing. And we got to be very careful about when we contract with people. We saw with the contracts overseas and contracts down in the Gulf. We know what that story is.

Let me bring up another specific example, and you can apply the principle that we are talking about here. You know, we talk about principles once in a while in Washington. I got to remember that.

[Laughter.]

Mr. REICHERT. I will write that down.

[Laughter.]

Mr. PASCRELL. Thank you.

What about the checkmate in terms of liquid explosives—

I went back into the literature, I went back into the narratives, and, you know, this was talked about, touched upon, not really extensively, several years ago. And we were basically talking about powder explosives. We didn't get too much discussion, as far as I see, into liquid explosives.

And is there product there— And what should we be doing— How do we get that product, if it has been developed, to the infrastructure which is under TSA— God bless them, again.

Mr. COHEN. Well, again, remember my model is customer-based.

Mr. PASCRELL. Right.

Mr. COHEN. And it is a customer-suction. So we start with a concept. We rapidly test its efficacy against real world. That is what we are doing in Socorro, New Mexico.

Mr. PASCRELL. But where are we in the real world about liquid explosives detection—

Mr. COHEN. Short answer, for the last year at Transportation Security Lab we have had 10 COTS—Commercial Off-the–Shelf—devices in tests. They are now at Socorro, New Mexico, being held up against 500-milliliter Gatorade bottles that have the explosive mixture in them. Not a simulant.

Mr. PASCRELL. Right.

Mr. COHEN. We have three additional devices that came as a result, in April of this year, from an SBIR, Small Business Innovative Research, initiative that my director had taken.

Three weeks ago I went out with a request for information. We have 30 respondents to that, of which we have 10 technology devices.

And we have committed that, within 30 days of receipt, we will send the offer and the device to either Tindle Air Force Base or Socorro, New Mexico, to test it against real world. If it is successful, or has the promise of success, we will fast-track it with that individual to further develop it to make it a product that TSA—Kip Hawley's screeners can use.

Now, in the near term, we are going to be limited to handheld devices and other controls. But the goal in a HSARPA world would be to have a portal where you didn't have to hold up things, but rather—and Congressman Pearce just shared with me, while you were gone, there is a small firm in New Mexico that is using laser technology from afar to see the traces of chem-nuclear-biological.

So it is a continuum. But in the end, it has to meet TSA's requirements for throughput, false positives, reliability, maintainability. That is the real world we live in.

Mr. PASCRELL. Can I just ask one more quick question, Congressman— And then you can go to the next person.

We have CDC, as you well know, when we are dealing with health matters. They have labs. They have labs down there.

Now, you say your experience has shown—and now that you are the head of the directorate, you are relying, it seemed to me, on 99 percent of the labs in the private sector. Is that true—

Mr. COHEN. No, sir.

Mr. PASCRELL. It is not true.

Mr. COHEN. You very wisely, very wisely—as I said, the 19 pages of implementing legislation were very well thought out.

Now, look, it is a new department. And I am used to, as a nuclear submariner, with fission. And you all attempted fusion. You tried to take 22 agencies, with all their culture and history and—

Mr. PASCRELL. You had to remind us, didn't you—

Mr. COHEN. —and put them together. And I will tell you, I think it is taking hold. I really do.

It is tough, but look, we are 20 years—you know, Congressman Skelton would talk to me all the time, and Chairman Hunter, about Goldwater–Nichols. We are 20 years into Goldwater–Nichols, and we have made enormous progress. But, you know, we still have Navy blue and Army green. We don't all wear purple. So there are cultures, and the cultures are important.

But you gave me access to the Department of Energy labs. These are incredible labs with chemistry and physics. You have invested hundreds of billions of dollars over the years.

So what I did, as soon as I stood up the rapid response team, on the 11th of August, for the liquid explosives, we had a video teleconference that included all of the DOE labs; my labs, which are small labs; and the centers of excellence that we have set up, the six, for the universities. Then we went out to industry, the RFIs.

The day of private labs in this country, like Bell Labs and IBM, is gone. It is gone.

And this is where the federal government and their vision and their commitment to critical mass funding of long-term research is so important, not just in homeland security, but for our very economy. And I salute you for that.

But the last thing you did—and I sound like Ginsu knives here—the last thing you did in the legislation was, you basically said in this new directorate—and the Chairman addressed this in his opening comments—you don't want me to reinvent the National Institutes of Health, and you don't want me to reinvent the DOD labs.

You have given me the DOE labs to leverage. You have told me that my incremental costs will be the same as the parent departments. Thank you so much for that.

But you have got one little line in my legislation that makes me the dominant S&T executive in the department of government, where you allow me, not to direct the requirements of DOD, DOJ, DOT, but you allow me full visibility and allow me to leverage their research, their investment, so that my monies can be wisely spent

on the incremental improvement to tailor it for the specific missions of homeland defense. And I thank you.

Mr. PASCRELL. If you can do that—I mean, we did do a couple things right. But if you can do that, I think then you are going to be on course. It is our job in oversight to make sure you do it. And we need to expedite what we have been talking about.

Mr. COHEN. Yes, sir.

Mr. PASCRELL. We need to move, and you know what has been done. You know what is in the past. I don't want to go back to the past. I want to look into the future.

Thank you, Mr. Chairman.

Mr. REICHERT. Thank you.

Mr. COHEN. Well, sir, if I might say, I tend to drive looking through the windshield, not the rearview mirror.

Mr. REICHERT. As a former cop, that is good.

[Laughter.]

Mr. COHEN. I am old, and I don't speed.

[Laughter.]

Mr. REICHERT. Mrs. Lowey, you are recognized for 5 minutes.

Mrs. LOWEY. Well, as a New Yorker, let me just say I wish you good luck.

Mr. COHEN. Thank you.

Mrs. LOWEY. And as a congresswoman, as a citizen of the United States that is trying to sort out the responsibilities of the Department of Homeland Security, the continuous reorganizations, and the snail pace at which everyone operates worries me as a grandmother of seven kids, frankly.

Because when you say 2 to 5 years—and you read these stories in the New York Times just this last week. I am not going to read the quote where Michael was talking about how outrageous everything is. Maybe Goldwater–Nichols is the answer, but at this point, we are constantly frustrated by the lack of progress.

Now, I understand how difficult it is to keep up with the terrorists. And I also serve on the Foreign Operations Committee. And you read what Abizaid is doing in terms of building clinics and schools, et cetera.

But thank goodness you are focused here on these responsibilities. And I really wish you good luck. Because if TSA is making decisions separate from your oversight, and you are not coordinating adequately, and, as we heard from that last hearing, multimillion dollar contracts are given out and then they can't get it to the market fast enough, it is really tremendously worrisome.

So I just hope this organization is done and you can get on to the substance. Otherwise, who knows— After this election, we may have to have another reorganization. You just don't know.

So I just want you to know I wish you good luck.

Just another example. I am not sure if it is even under your purview. Before I get to interoperability, Mr. Chairman—I gather that wasn't touched on today as yet. They are probably waiting for me. You left that for me to deal with.

But I am very pleased to take my shoes off. I am sure you are aware in all of our airports in this country there are people who do maintenance. There are people who do food service. Not only

don't they have to take their shoes off, they don't have to go through the metal detectors. They get a badge.

In addition to interoperability, I have been talking about that. I think it is outrageous. I can have my badge saying "Congresswoman," and I am very happy to take my shoes off. But they get a badge. It is not re-inspected more than every 2 or 3 years. And they can go into the secure areas.

So I really worry about that.

And we know what happened at Heathrow when one of the accused was a worker there. And they are moving much faster than we are in that regard.

So I wish you good luck.

With regard to interoperability, because I think it is directly related, I am really interested in how your plan affects first responders.

In my district, the one topic they mention over and over again is interoperability. We have been talking about it—the chairman, Mr. Pascrell, myself—for many years now.

When I read the inspector general's report in March, that S&T has not approved a single standard for interoperability, this is, frankly, astounding to me. Communication failures plagued first responders in every major emergency in the last 15 years. We still do not have a single standard.

I am not going to quote the former secretaries, who promised, you know, a couple of months, a couple of months.

Public safety agencies are spending billions of dollars building and upgrading communication networks, but the federal government is there, not providing any assistance.

Unfortunately, what is happening is our local first responders, our local towns and villages, can't wait for the federal government. So they are acting responsibly, building wireless networks that will save lives.

Now, I know you have only been at the department less than a month. Can you possibly tell me, based upon your experience and your involvement in this reorganization, why there have been so many delays in issuing interoperability standards—

Mr. COHEN. Well, Congresswoman, I honestly can't. I would be glad to take that for the record, just to document what the problems were.

But you and I are on the same page with interoperability. This is not unique to first responders. It is just exacerbated with first responders because we have state, local, et cetera. But even in the Department of Defense and in coalition warfare, as you are very well aware, there are interoperability problems. There are frequency problems. There are cipher problems.

That is not meant to make excuses.

One of the things I said earlier, while you were at the vote, is, in my view, if you start with the sheriff of Mayberry—and the scale of my responsibility takes me from the sheriff of Mayberry to the New York Police Department, and it takes me from the tribal volunteer fire and driving a 1940 LaFrance Pumper, up to Chicago's exceptional fire department.

So, what I do has to be scalable, has to be affordable, has to be durable. And all those are good words.

I will tell you, shortly after 9/11, I was called up to New York City by the police commissioner. And they were focused on radiological issues. They didn't know what was going to come next.

And the police commissioner took me in a room. I was chief of naval research. And, you know, they had about three dozen, maybe four dozen RADIACs. These are radiation detectors, handheld. He said—this goes to the comment of retailing and the cottage industry that has developed. Everyone wanted to sell the New York Police Department RADIAC detectors to put in the patrol cars, et cetera. He said, "Admiral, I don't know what to buy. This is outside our area of expertise."

And I said, "Commissioner," I said, "if you will send one knowledgeable patrolman," meaning on the use of these, how they might be used, "come down to the Naval Research Laboratory, and we will test them against the specifications that the manufacturer has said. I am not going to tell you what to buy, but I will tell you, do they meet the specs— Do they do it in a timely manner, et cetera— Are they durable—"

We did that. They were very thankful, et cetera.

So I take my responsibilities for test and evaluation—so we don't buy no junk—and for setting standards very, very seriously. As a New Yorker, Congresswoman, you know I don't have a lot of patience. That is not one of our traits.

Mrs. LOWEY. You are absolutely right. You are absolutely right.

Mr. COHEN. But I can't promise you the world. I can tell you, when you get into the standards, you get into interoperability, you cut across city, state, county and federal lines, you get involved with the FCC, it is a cauldron. But I think our national security deserves better. And I will work toward that.

Mrs. LOWEY. Well, as I understand it, it is not a technical problem. The technology exists. It is a matter of leadership, and there hasn't been any at the Department of Homeland Security.

And I am not saying that you should be telling people whether to get Motorola or Cingular or this and that. But it is a matter of which technology should be used so there can be some coordination.

Now, as I understand it, there are about 180,000 people at the department, and less than a handful are working on interoperability. So the real question is, do you intend to make first-responder communications—and you should be honest with us.

You could say to me, "Ray Kelly knows what he is doing." I have tremendous confidence in Ray Kelly, frankly. He duplicated and replicated his own international intelligence agency because he didn't have confidence in the CIA.

So that may be it. But if you feel the OIC and SAFECOM need additional resources to get this done, I think it would be helpful for us.

Because we all, in a bipartisan way, have been talking about this issue. And it is my understanding that Dr. Boyd, the previous head of SAFECOM and a leader on communications issues, was removed from the office several months ago.

I didn't even know that. Thank you. He just let me know that.

Can you tell me how leadership changes at SAFECOM may affect the progress you are going to make—

I mean, it has been a revolving machine over there, so I understand the difficulty you are having. But we also understand that in the field, be it New York or any place else, New Jersey, Florida, any place else in the country, this is a priority. And it hasn't been a priority at the Department of Homeland Security.

Mr. COHEN. Well, let me very rapidly address several issues you raised.

First of all, I am a big fan of Commissioner Kelly's, and God bless him for what he has done. And I think he has set a model.

And in my construct with international engagements, et cetera, you will see very many of the same things, because I cannot allow us to suffer from technological surprise. And you have got to be out there in the field.

Number two, my vision and my experience with S&T—and we have talked a little bit about this previously—is, it is like the BASF commercial on the Sunday morning talk shows. They don't make the device, they make the device better. So S&T doesn't make the device. I make the device better.

Now, concerning Dr. Boyd, he is a key player in my organization. I asked him to be my division head for C4/ISR, Command, Control, Computers, Communications, Intelligence, Surveillance, and Reconnaissance. He will have, as will the human factors, significant crosscutting responsibility in my organization.

But as I look at SAFECOM, as I look at other product lines, one of the problems organizationally, in my opinion, is that we have tried to make the S&T Directorate both a service organization and an operational unit. It doesn't work.

And so, as the department has matured, the delivery of the capability, I believe, should fit and rest with the operations and agencies that do that, like the TSA and Border Patrol, et cetera.

I am there to hear their requirements, understand their shortfalls, find the cutting-edge technology and bring it to them in a timely, affordable and usable manner. And that will be the model that you will see from me.

Mrs. LOWEY. Now, does that red light count— I am assuming—

Mr. REICHERT. Yes. I am going to—

Mrs. LOWEY. You have been very gracious, so—

Mr. REICHERT. Yes. Thank you. I—

Mrs. LOWEY. Thank you so much. I know we could go on, but the chairman has been very generous.

And I know we all wish you good luck. And we hope that in the next couple of months you can solve these problems.

Mr. COHEN. I will do my very best.

Mrs. LOWEY. We thank you very much.

Thank you, Mr. Chairman.

Mr. REICHERT. You are welcome, Mrs. Lowey.

We will have a second round, but I am going to be a lot tighter on the clock. There were a few members here, and we were interrupted by a vote. And so we will have a second round if others have questions.

I want to just touch on my experience just a little bit and share some frustration.

The sheriff's office in King County is 1,100 employees. And during my time there, I have watched the development—I started in

1972. Our first tool was a .38 revolver. It was a civil defense weapon, and the barrel didn't line up with the cylinder. So that is quite—you know, it is important that the bullets line up with the holes when, you know, you pull the trigger.

But look how far we have come. But it has taken us a long time to—just in the first-responder law enforcement world. In 1982, no computers. Working on a major case, a Rolodex file, 3-by–5 note cards; a single person sitting down at a desk with a magnifying glass and a fingerprint card, physically looking at the card and counting the loops and the whirls. Now, AFIS, Automated Fingerprint Identification System. Now, live scan.

In 1982, taking a body sample—blood, bodily fluid of some sort—looking for a blood type to lead to the arrest of the suspect. And today, DNA that identifies one person as the person who committed the crime, or it can identify a person who was not responsible for the crime.

Tremendous progress in science and technology in the world of law enforcement.

And then the new technology. As the sheriff, just a couple of years ago, officers wanted the new taser, right— Buy a taser. Well, in one year the new model was smaller, more effective, safer.

And so the things that you have to deal with, I understand. But there is the frustration with people on the street.

Of the number of vendors, 800 to 900 vendors, who have some sort of an answer to, or piece of the puzzle to, interoperability, as Mrs. Lowey has described, 800 to 900 to 1,000 vendors that have some piece of the puzzle, an answer to health I.T. and sharing of information.

And so it also touches on the ranking member's question of the retailing of technology and the difficulty that local governments and local police departments and fire agencies and EMTs, et cetera, emergency managers have in weeding through this forest of technology. Which is better and what is going to work—

How do you help local governments and local law enforcement and local officials weed through, now, all of this information that is out there to help them make the right decision— You touched on it just a little bit, but I need a little bit clearer picture, I think.

Mr. COHEN. Well, again, Chairman, my customers are the 22 agencies and directorates within Homeland Security. And they have very clear missions defined in enabling legislation.

The customer of the customer are the first responders, and we have already talked about that.

I plan on dealing, to the best of my ability, in intelligent ways, whether it is Web-based, whether it is outreach—I can't do it one at a time, obviously, with 800—and I think those numbers, you know, may be low—

Mr. REICHERT. I agree.

Mr. COHEN. —actually. This is an incredible country. You know, for Ms. Lowey, Tom Friedman, in his book, "The World is Flat," if you watched him within the last month with Charlie Rose and with Tim Russert, he said, "You know," he said, "I had to revise the book because I was singing the praises of Bangalore, and I was singing the praises of China." And he said, "I got my head handed to me by the entrepreneurs in America."

Because when you have a free country, and you have the venture capital that we enjoy, and we have the intellectual property protection, and we have the SAFETY Act, people come out. They rise to the occasion. And you couple that with our educational system, which has challenges, and wonderful things happen.

So I view my responsibilities as almost schizophrenic. On one hand, I have to look for the next generation, cultivate it, make sure we stay ahead, because it is a flat world, and our discoveries are quickly leveraged.

What I found in Navy is many of our suppliers have turned away from patents. Patents take too long. To them, it is first to market. They assume that their product, their intellectual property, will be leveraged by others who may not have the same standards or rules as we do.

And so, get to the market. And Steve Jobs does this better than anyone else. With iPod and Webcast, he stays one step ahead. So I have got to do that.

On the other hand, I have to do the more mundane things of the here and now, things that are nearly ready, are mature, and get them out so they are available, with standards, with evaluation, to the first responders.

But at the end—and this is just a personal comment—I don't think the federal government can solve all of these problems. In the end, it is the New York Citys and the King Countys and the reservations that will decide for themselves the risk-consequence balance, decide where they put their precious investments, just as they do in education, just as they do in roads.

I can enable that. I can facilitate that. But I can't solve it by myself.

Mr. REICHERT. Thank you.

Mr. Pascrell—

Mrs. LOWEY. Could I just follow up, Mr. Chairman, and just—I was going to ask you to bear with me—

Mr. REICHERT. The young lady is recognized.

Mrs. LOWEY. —for just a moment, because that is an important issue.

There are former members of FEMA—no names mentioned at the hearing—other federal officials, who are making mega millions of dollars today. I will get you this contrast. We read, and Chairman Mica was talking about this at the hearing, you know, $5.3 million here, $10 million here.

That is an important question, and maybe you can respond to that. And maybe it has to do with interoperability, as well.

Maybe you don't have a role in that. Maybe we just leave it to Commissioner Kelly and New York City to make its own decisions. Maybe we shouldn't be asking you for 3, 4—when did we start—— 5 years, for standards, and we can't get it out. Maybe we should let these salesmen just continue to approach the local governments and make the decisions.

So maybe we should save all that money with the Department of Homeland Security, and I shouldn't be asking you for standards anymore.

Mr. COHEN. I want to make sure that my comments were not misunderstood at all.

I do believe that we will be most effective and efficient if we have national standards that meet the needs and are scalable from the sheriff of Mayberry up to the great police department of New York City.

And there are federal responsibilities. And I look forward to your taskings and your support in doing that.

But, in doing that, one size doesn't fit all. And I don't want to fall into the trap of, in any way, undermining the innovation or the authorities—this is not a political or philosophical; this is how we run our households, you know— There are different personalities. There are different priorities, et cetera.

And in terms of any predecessors or whatever, Ms. Lowey, let me tell you that I make less in this job—I didn't even ask what the salary was. I can tell you that up front. But I make less in this job than I made on the day I retired on active duty in the Navy.

Mrs. LOWEY. Just what do you mean, "this" job—

[Laughter.]

Mr. COHEN. You know, I will be an old—I am an old man, and I promise you I won't write a book.

Mr. REICHERT. I would like to take a moment to comment on your response to Mrs. Lowey's question.

We passed the 21st Century Communications Act of 2006, which refers to standards, national standards, and it also directs that there be assessments and evaluations of current systems in place across the country. That was passed on the House floor about 2 months ago with a vote of 414 to 2.

So people in the House of Representatives recognize the need for national standards and also recognize the need for someone to take the lead again, as some have said today, a leadership role in assessing what is out there currently.

But there is certainly a definite need for a true partnership, where the federal government takes the lead and is also there in a supportive role as local governments and local officials build their own systems that fit their communities, but with a standard that is nationally set to ensure that their money is being well spent and that they interconnect with the state and national system.

So I think that is really where we want to head. So we appreciate your answer.

Mr. Pascrell—

Mr. PASCRELL. Yes. I have a few more questions, Mr. Chairman.

First, I certainly believe that we should have national standards. I mean, you know, we have spent a lot of time airing it out.

But we have a very different system than the British. I am convinced that they do something better than we do, but not too many things.

[Laughter.]

That is why we had the Revolution, and continue to have them, by the way.

But the British believe more in a ground-up situation, bottom-up. We are top-heavy. We think that the folks at the top that the administration appoints, at these levels of government throughout homeland security, know best for the rest of us.

If you don't ask cops, if you don't ask firefighters, if you don't ask EMTs, whether you are talking about interoperability or oper-

ability, whether you are talking about intelligence, you need to talk to the people who do the job every day and see what their needs are to combat the situation.

We don't seem to get that. We don't seem to really understand it.

Maybe they don't articulate it as we could articulate it. This is first—we are talking about safety here. We are not talking about articulation, you know— We are talking about some principle here to get something done. I think the British have it right in that regard.

My second point is this. I don't sense a sense of urgency in Homeland Security to do the things that need to be done in order to protect our families and our neighborhoods and the rest of the country. We have a lot of fear mongering. And we get people upset, create a lot of anxiety, make sure they are scared as hell. That doesn't help us, though, in the final analysis.

I mean, not that you shouldn't be realistic. We want to be realistic. We don't want to hide anything. We want to be as transparent as possible.

I don't sense that urgency. I am sorry, Mr. Secretary, but that is how I feel.

But I want to get into the subject of basic research. I think that this is an area that has been neglected in terms of homeland security, myself. That is only my opinion.

The Transportation Security Lab, in 2005, the Congress directed Science and Technology to control the TSL budget, where it proceeded to delay around 8 months in allocating the money.

Again, we are looking ahead, we are not looking back. But I want to put this into perspective.

Observers have said that the lab had to slow the projects and the operations that were—it was almost a standstill at one point. This year the Senate appropriations language mandates returning the lab to the TSA.

The problem with this back-and-forth is that the scientists there are essentially being bounced around like a yo-yo, ping-pong ball, between those two agencies, not knowing where they will land and not having a solid and predictable line of funding.

What solution do you recommend for this problem— And practically, who should control that TSL lab— Who do you think should—

And the question under that area of basic research is the following: How will basic research grow under your reorganization plan— Now, I am not talking about technology now; I am talking about basic research.

How much money in the budget is devoted to basic research— And how much money should be dedicated in the future to basic research— And what efforts are under way to support basic and applied research—

You know the problems. Well, let's start with those areas.

And a final point I wanted to make is, in conclusion, was, how can we help you— Seriously. We have made it a practice on this committee, thanks to the chairman, to be, I think, bipartisan, because neither party is privy to virtue as to how we are going to save the country. But how can we help you—

And in order for you to answer that question, it would seem to me—well, I know what your answer is going to be. In my mind, you have to make sure that you pledge not to be a sycophant, that you will be direct with us, and we will get you what you need, I promise you.

Mr. COHEN. Well, sir, let me answer the last one first. No one has ever called me a sycophant.

Mr. PASCRELL. Good.

Mr. COHEN. I have heard words like rude and obnoxious. And my wife would like me to behave better.

Mr. PASCRELL. Those words don't come to mind for me.

Mr. COHEN. I am sure. And those of us who come from the greater metropolitan area can appreciate that.

You can help me enormously because I don't have all the answers. I am just one person.

I care about this country. It is an incredible ongoing experiment in democracy. And I don't read fiction; I read nonfiction. And I read "The Election of 1800," and I read "The Founding Brothers," and we live in an incredible country. And, like you, my relatives were immigrants—

Mr. PASCRELL. Right.

Mr. COHEN. —and so I have spent my life with an ethos of service.

But just because I am service-oriented, like you are, doesn't mean that I am omniscient or that I have the right answers.

And I certainly agree that defense—and whether it is the away game, the department of offense, or Department of Homeland Security, defense, it is bipartisan. It is nonpartisan. And it is a long tradition, a 200-and-nearly–30-year tradition of that. And I respect that so much.

But you are the elected representatives of the constituents. And the constituents are the citizens. And the citizens are who our first responders look to protect.

And, at a higher level, by bringing to bear technology, whether it is in intelligence or surveillance—and I mean that with a big "S"—situation awareness, et cetera, detection, prediction, the psychology of terrorism, I believe that we can work to deter the terrorists. Because the terrorists are cowardly, and they only strike where they think they can get away with it and we have a vulnerability.

Now, we will have vulnerabilities. We don't have to share those publicly. And we can work to minimize those vulnerabilities, flatten the playing field, level the playing field.

So your staff has already, in a very bipartisan way, taken time with me, as have the other committees. You are holding this hearing.

You talk about urgency. In 3 weeks, sir, I have gotten approved a major realignment that I know works. Is it optimum— I don't know; time will tell. But on Monday we are having an all-hands—this one is not voluntary. This one is mandatory, because we are aligning to the organization for the accomplishment of our mission as specified in the law and legislation.

On basic research, I have already told you how strongly I believe in that. It is a shining light on the hill. It is what, in large meas-

ure—and I have traveled the world—makes America so unique. I am not putting down the intellect or the basic research in other countries, but no one does it as broadly as we do.

And I have talked about Bayh–Dole and how important I think that has been in basic research—spinoffs, startups, venture capital, et cetera.

In Navy—and this was different than Army and Air Force—we had a balanced basic and applied in advanced technology research portfolio. It was split 50–50.

Because of how the Congress wrote the legislation, which I appreciate, and you want me to leverage, not recreate, NSF, NIH, et cetera, my feeling is, I don't need that much money. I just need more focus.

But you will see, as I go through the requirements and the budget development process, that more monies within the construct of the administration and all the demands will be applied to focused—I want to make that clear—not presuming the outcome, but focused basic research.

The criteria that I will use is, can this area, can this discipline, might this discipline contribute to a clear mission function in law of the department—

If the researcher can show the possibility, that is sufficient, and then we will rack and stack those within the assets I have. If they can't even meet that low standard—remember, I am not asking, "Show me how it will"; I am saying show me how this nanotechnology research, this sensor research and basic research might contribute to a known mission requirement—then I think they haven't made the cut.

On the Transportation Security Lab, I have been working assiduously with the staff that wrote that legislation. I understand their frustration. I respect their frustration.

But, sir, you have it exactly right. At the end of the day, if we keep playing ping-pong with that incredibly valuable lab, who understands aviation, understands the FAA, understands TSA—they are an S&T organization.

Susan Hallowell has been invaluable to me. She has been one of the three leaders in my rapid response team, along with Jim Tuttle, the program manager, and Dr. George Zarur, who is the scientist who understands the chemistry, et cetera.

And 2 weeks ago, Kip Hawley and I signed a memorandum of understanding. It had been in the works for a long time. To me, it was a priority. This was the wolf closest to the door. Kip, with joy in his heart, signed that MOU. We delivered copies to all of the staff, and it is my understanding that the other body is seriously considering not going forward with the transfer of TSL.

I believe if we transfer TSL we will lose ground. We will lose time. It would be a mistake.

And I appreciate your support in this area, sir.

Mr. PASCRELL. Thank you.

Thank you for your patience.

Mr. REICHERT. That is it— You are done—

Well, we appreciate you taking the time. Sorry for a couple of interruptions.

I just want to make a brief ending comment here.

You have been, as you said, in your office less than a month. And we can sense your energy and enthusiasm and compassion and passion for your job. And I know that the people who work with you as partners in your directorate will recognize that.

And we look forward to great things happening, and our next invitation to have you come and testify before us.

And the chair would ask unanimous consent, if it hasn't already been accomplished, that the undersecretary's statement be submitted for the record. Without objection, that is ordered.

This hearing is concluded.

Mr. COHEN. Thank you, sir. And it is an honor to serve.

[Whereupon, at 12:10 p.m., the subcommittee was adjourned.]

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